

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

To:

CT IPS AM Mch P  
see form PCT/ISA/220

rec. AUG 9 1 2005

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Date of mailing

(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference

see form PCT/ISA/220

04P01572WO

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

PCT/EP2005/001405

International filing date (day/month/year)

04.02.2005

Priority date (day/month/year)

31.03.2004

International Patent Classification (IPC) or both national classification and IPC

H04Q11/00, H04L12/56

Applicant

SIEMENS AKTIENGESELLSCHAFT

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2005/001405

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2005/001405

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	2-5
	No: Claims	1
Inventive step (IS)	Yes: Claims	
	No: Claims	1-5
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	

2. Citations and explanations

**see separate sheet**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)

International application No.

PCT/EP2005/001405

Re Item V.

- 1 Reference is made to the following documents:
  - D1 : DUESER M ET AL: "ANALYSIS OF A DYNAMICALLY WAVELENGTH-ROUTED OPTICAL BURST SWITCHED NETWORK ARCHITECTURE" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 20, no. 4, April 2002 (2002-04), pages 574-585, XP001130015 ISSN: 0733-8724
  - D2 : ZAPATA A ET AL: "Optimising scheduling delay in wavelength-routed optical burst switched networks with re-attempt capability" OPTICAL FIBER COMMUNICATION CONFERENCE, 2004. OFC 2004 LOS ANGELES, CA, USA FEB. 23-25, 2004, PISCATAWAY, NJ, USA, IEEE, vol. 2, 26 February 2004 (2004-02-26), pages 625-627, XP010745939 ISBN: 1-55752-772-5
- 2 INDEPENDENT CLAIM 1
  - 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document): "A method of optimising connection set-up times between nodes in a centrally controlled network (page 575, right column, lines 26-30); the method comprising sending a path set-up request from a node to a controller (page 576, left column, lines 31-35); if a connection cannot be made at a requested time, not sending a no acknowledgment message (page 576, left column, lines 35-37), but only sending an acknowledgment message from the controller to the node, when the connection has been established (page 578, left column, lines 10-16)."
  - 2.2 Furthermore, in respect of the disclosure in document D2, the subject-matter of claim 1 is not inventive in the sense of Article 33(3) PCT, since D2 discloses (the references in parentheses applying to this document): "A method of optimising connection set-up times between nodes in a centrally controlled network (figure 1, 'control node'); the method comprising sending a path set-up request from a node to a controller (fig. 1, 'lightpath requests'); if a connection cannot be made at a requested time, not sending a no acknowledgment message (fig. 1, 're-attempting requests'), and only sending an acknowledgment message from the controller to the node, when the connection has been established. (fig. 1, 'ACK')". It is well known by the skilled person that n

this system, which has a re-attempt time  $t_{\text{sched,max}}$ , the reject message does not necessarily have to be sent, since it could also, for example, be replaced by a timer and time-out system at the requesting node. Furthermore, D2 discloses that increasing  $t_{\text{sched,max}}$  reduces the network blocking probability (see page 625, lines 10-11). Therefore it would be obvious to the skilled person that in order for the control node not to send any reject message, the maximum scheduling period should be unlimited.

3 DEPENDENT CLAIMS 2-5

Since the queueing systems of claims 2-4 are design options, well known by the skilled person and the networks disclosed in D1 and D2 are also optical networks, dependent claims 2-5 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).